

09 90/141

**Dual Hardmask Process for the formation of Copper/Low-K
Interconnects**

ABSTRACT

The invention describes a method for forming integrated
5 circuit interconnects using a dual hardmask dual damascene
process. A first hardmask layer (50) and a second hardmask
layer (60) are formed over a low k dielectric layer (40).
The trench pattern is first defined by the second hardmask
and via pattern is then defined by the first hardmask. Any
10 interaction between low k dielectrics (40) and the
photoresist (80) at patterning is prevented. The BARC and
photoresist may be stripped before the start of the
dielectric etching such that the low k dielectric material
is protected by the hardmasks during resist strip.

15

FOUO 44-38860-1000